

ABSTRACT

Efficacy Test of Temulawak (*Curcuma xanthorrhiza* Roxb) on Blood Sugar Level in Mice with Hyperglycemia

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Introduction: Diabetes Mellitus is one of the most common disease which occurs to many people all around the world. The drug therapy for diabetes could cause so many side effect, therefore it encourage researcher to study on the extract of Java Ginger, widely known as temulawak (*Curcuma xanthorrhiza* Roxb) for the treatment of diabetes mellitus. This study examines the activity of the temulawak on blood sugar level.

Methods: This study is an experimental study and the samples of this study are mice. Samples were tested and obtained in pharmacology laboratorium, Airlangga University. Antidiabetic test on temulawak extract is conducted to see will it lower the blood sugar level and how much doses is needed for an optimum effect. Streptozotocin induced mice were then given a temulawak extract and glibenclamide to see the comparison between them two.

Results: After two weeks of treatment on the sample of mice, the result shows that temulawak extract are able to lower the blood sugar level and can achieve the same as the result of the comparison which is glibenclamide.

Conclusion: There is antidiabetic activity in temulawak, proven by the decreasing of blood sugar level in the mice samples.

Keywords: *Curcuma xanthorrhiza roxb – Mice – antidiabetic*